CIA/OSR /MEMO EF 750124 OSR CONTRIBUTION ON CHINA'S JAN 75
EXPANDING PRODUCTION OF MER.SHIPS TOP SECRET/TK/SI/WI 01 OF 01

25X1

CIA/OSR / MEMO EF 75-0124

24 January 1975

MEMORANDUM FOR:

THROUGH :

25X1 ATTENTION :

SUBJECT : OSR Contribution on China's Expanding Production of Merchant Ships

1. Attached is the OSR contribution prepared at your request for the OER Intelligence Report, "The Expansion of China's Merchant Marine."

2. The contribution is limited to merchant ships over 1,000 gross register tons while the displacement tons used for individual ships are generally those that have appeared in Chinese press releases.

MICRO ONLY

25X1 -s-

25X1

Attachment:
As Stated

[redacted] 25X1

CHINA'S EXPANDING PRODUCTION OF
MERCHANT SHIPS

A significant advance in the production of merchant ships has been achieved by the Chinese over the past three years. Production is at an all time high with the completion of more than 500,000 tons deadweight over the period--more than 60 percent of the total produced from 1960 through 1974. The sharp increase in output first occurred in 1972 when 115,500 tons was produced, which was more than double that of the previous year. Production again doubled in 1974 with the completion of 226,000 tons. A breakdown of tonnage produced by year is shown in the chart.

Despite this spurt in production, the shipbuilding industry remains far short of the goal of 2 million tons of merchant shipping that [redacted] 25X1

25X1 [redacted] was set for the period 1970-1975 under the current 5-year plan. Assuming a substantial increase in production for 1975, as seems likely, the best that the Chinese probably will achieve is about one million tons.

Cargo ships have continued to receive the main emphasis, and during the period they accounted for two-thirds of the total tonnage produced. However,

[redacted] 25X1

ESTIMATED COMPLETIONS OF CHINESE MERCHANT SHIPS BY CLASS, 1972-1974

SHIPS BY CLASS	1972		1973		1974	
Tankers	No.	DWT	No.	DWT	No.	DWT
Ta Ching 61	0	0	0	0	1	24,000
Ta Ching 27	0	0	4	60,000	6	90,000
Total Tankers	0	0	4	60,000	7	114,000
Cargo Ships						
Zheng Zhou	1	25,000	1	25,000	0	0
Chang Feng	1	16,000	0	0	1	16,000
Li Yang	0	0	1	13,500	0	0
Da Li	2	27,000	2	27,000	0	0
Dong Feng	3	40,500	5	67,500	6	81,000
Tientsin	1	7,000	0	0	0	0
Total Cargo Ships	8	115,500	9	131,000	7	97,000
Passenger Cargo Ships						
Chang Cheng	0	0	0	0	2	15,000
Total Merchant Ships	8	115,500	13	191,000	15	226,000

1. Only merchant ships over 1,000 gross register tons are included and the deadweight tonnages (DWT) shown are those generally used in Chinese press releases.

the Chinese have begun a determined effort to increase tanker production and in 1974 for the first time the tonnage of tankers and cargo ships produced were about equal.

Three factors mainly account for the substantial increase in production noted during the period--an increase in the size of ships being built, an increase in shipyard capacity, and a decrease in the construction time of individual units.

Series production of such standardized ships as the 13,500-DWT Dong Feng class cargo ship and the 15,000-DWT Ta Ching 27 class tanker was a key feature in the increase in production and accounted for most of the tonnage produced. Although both are substantially larger than most ships produced before 1972, the Ta Ching 27 class tanker is small by Western standards. During the period, however, two new classes of much larger ships were introduced. The 25,000-DWT Zheng Zhou class cargo ship was completed in 1972, and the 24,000-DWT Ta Ching 61 class tanker was completed in 1974. The Ta Ching 61 class comes somewhat closer to Western standards and both are likely to have a prominent role in future production plans.

5X1

[redacted]

Expanding shipbuilding capacity also was important to the increase in production. Beginning in the late Sixties construction began on several large new building ways and large capacity cranes have been installed. [redacted] 25X1

25X1 [redacted]

The four principal shipyards--Lu-ta shipyard in Dairen, the Hu-tung and Kiang-nan shipyards in Shanghai, and the Tung-lang shipyard in Canton--are among the most capable in China with large naval shipbuilding programs in addition to the production of merchant ships. [redacted] 25X1

25X1

[redacted]

5X1

[redacted]

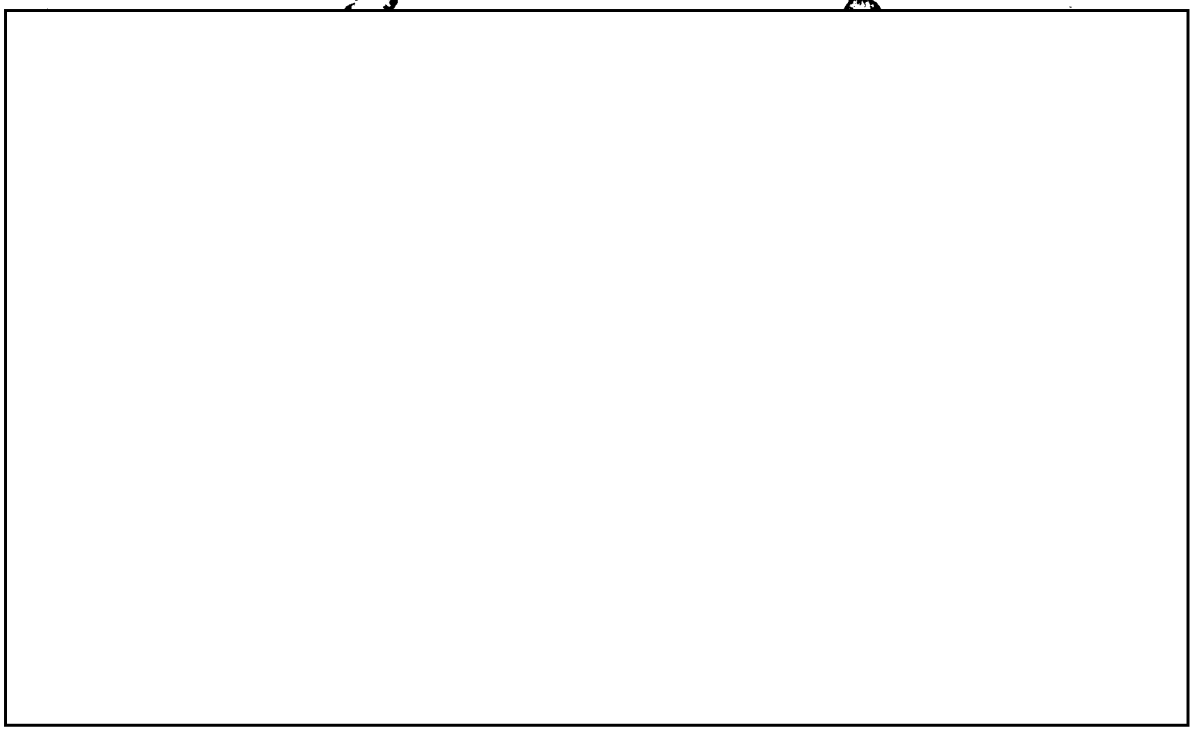
25X1

[redacted]

PRODUCTION OF CHINESE MERCHANT SHIPS BY SHIP AND SHIPYARD, 1972-1974

SHIPS BY SHIPYARD AND CLASS	1972	1973	1974
Tankers			
Lu-ta Shipyard			
Ta Ching 61 (24,000 DWT)			Ta Ching 61
Ta Ching 27 (15,000 DWT)		Ta Ching 31	Ta Ching 48
		Ta Ching 45	Ta Ching 49
		Ta Ching 46	Ta Ching 50
		Ta Ching 47	Ta Ching 51
			Ta Ching 52
Hsin-kang Shipyard			
Ta Ching 27 (15,000 DWT)			Ta Ching 40
Cargo Ships			
Hu-tung Shipyard			
Zheng Zhu (25,000 DWT)	Zheng Zhu	Jin Zhou	
Kiang-nan Shipyard			
Chang Feng (16,000 DWT)	Chang Feng		Chang Chun
Yi Yang (13,500 DWT)	Yi Yang	Li Yang	
Dong Feng (13,500 DWT)	Qing Yang	Feng Yang	Feng Ch'ing
		Feng Ming	
			Feng Yan
			Feng Hsiang
Pu-tung Shipyard			
Dong Feng (13,500 DWT)	Feng Yun	Feng Hua	Feng Lang
			Feng Bao
Tung-fang-hung Shipyard			
Dong Feng (13,500 DWT)		Hsi Yang	
Tung-lang Shipyard			
Dong Feng (13,500 DWT)		Liao Yang	
Lu-ta Shipyard			
Da-Li (13,500 DWT)	Da Li	Da Feng	
	Da Ye	Da Xing	
Hsin-kang Shipyard			
Tientsin (7,000 DWT)	Tientsin		
Passenger Cargo Ships			
Hu-tung Shipyard			
Chang Cheng (7,500 DWT)			Chang Chin
			Chang Hsiu

25X1

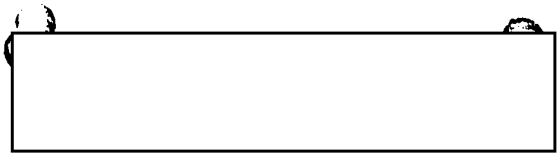


25X1

In spite of these changes, merchant ship production represents only a small share of China's shipbuilding capacity. At the same time that merchant shipbuilding capacity has been expanding by adding new ways at existing shipyards, three major shipyards were being constructed for naval use. This allocation of resources is also apparent in the production levels between naval and merchant ships.

In comparison with the West the industry continues to lag. Production is low and limited in the types of ships produced. Construction times are still higher than in the West and the Chinese have not yet begun to use modular techniques that can substantially reduce the time spent in construction. There are shortages. Marine engines at times appear to be in

25X



short supply and some shipbuilding steel has been imported. Perhaps the main weakness is in the production of equipment and components where advanced technologies are involved in the design or production process.

Nevertheless, the industry has some strong points. Design facilities are modern, and some Western hull design features are appearing on Chinese ships. The shipyards are well equipped and appear to have no difficulty with hull assembly or outfitting.